

**Form PTO-1449 (modified)**

List of Patents and Publications for Applicant's

**INFORMATION DISCLOSURE STATEMENT**

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Atty. Docket No.  
SILA:096Serial No.  
10/074,591Applicants  
LYSANDER LIM ET AL.**RECEIVED**

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## U.S. Patent Documents

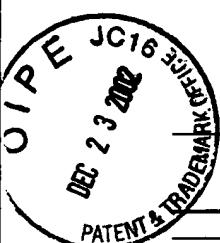
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## Foreign Patent Documents

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**U.S. Patent Documents**

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.
JC	A1	5,828,955	10/27/98	Lipowski et al.			8/30/95
	A2	6,035,186	3/7/00	Moore et al.			3/11/97
	A3	6,075,979	6/13/00	Holtvoeth et al.			3/5/97
	A4	5,764,171	6/9/98	Stikvoort			4/2/96
	A5	6,148,048	11/14/00	Kerth et al.			9/26/97
	A6	4,713,563	12/15/87	Marshall et al.			5/12/86
	A7	4,070,632	1/24/78	Tuttle			9/22/76
	A8	4,236,252	11/25/80	Kominami et al.			2/6/79
	A9	4,680,588	7/14/87	Cantwell			12/5/85
	A10	4,857,928	8/15/89	Gailus et al.			1/28/88
	A11	4,989,074	1/29/91	Matsumoto			9/21/89
	A12	5,050,192	9/17/91	Nawata			11/21/90
	A13	5,083,304	1/21/92	Cahill			9/28/90
	A14	5,142,695	8/25/92	Roberts et al.			3/21/91
	A15	5,194,826	3/16/93	Huusko			4/12/91
	A16	5,235,410	8/10/93	Hurley			7/10/91
	A17	5,267,272	11/30/93	Cai et al.			2/14/91
	A18	5,283,578	2/1/94	Ribner et al.			11/16/92
	A19	5,345,406	9/6/94	Williams			8/25/92
	A20	5,430,890	7/4/95	Vogt et al.			11/20/92
	A21	5,442,353	8/15/95	Jackson			10/25/93
	A22	5,451,948	9/19/95	Jekel			2/28/94
JC	A23	5,500,645	3/19/96	Ribner et al.			3/14/94

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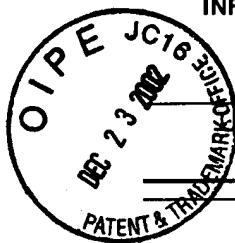
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Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.
UC	A24	5,557,642	9/17/96	Williams			11/14/94
	A25	5,712,628	1/27/98	Phillips et al.			8/31/95
	A26	5,742,189	4/21/98	Yoshida et al.			9/14/95
	A27	5,862,465	1/19/99	Ou			12/30/96
	A28	5,973,601	10/26/99	Campana			12/2/97
	A29	5,758,276	5/26/98	Shirakawa et al.			5/31/96
	A30	5,740,524	4/14/98	Pace et al.			12/14/95
	A31	4,623,926	11/18/86	Sakamoto			11/9/836
	A32	5,341,135	8/23/94	Pearce			4/30/92
	A33	5,241,310	8/31/93	Tiemann			3/2/92
	A34	4,562,591	12/31/85	Stikvoort			2/2/84
	A35	5,243,345	2/21/92	Naus et al.			2/21/92
	A36	5,469,475	11/21/95	Voorman			5/31/91
	A37	4,912,729	3/27/90	Van Rens et al.			12/15/88
	A38	4,627,021	12/2/86	Persoon et al.			3/13/84
	A39	4,692,737	9/8/87	Stikvoort et al.			10/17/86
	A40	4,584,659	4/22/86	Stikvoort			7/5/83
	A41	4,797,845	1/10/89	Stikvoort			12/11/86
	A42	4,604,720	8/5/86	Stikvoort			3/16/84
	A43	5,157,343	10/20/92	Voorman			5/31/91
	A44	5,124,705	7/23/92	Voorman			7/10/91
	A45	4,468,790	8/28/84	Hofelt			2/16/82
UC	A46	5,859,878	1/12/99	Phillips et al.			8/31/95

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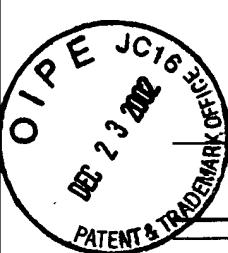
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UC	A47	6,323,735	11/27/01	Welland et al.			5/25/00
	A48	6,167,245	12/26/00	Welland			5/29/98
	A49	6,388,536	5/14/02	Welland			6/27/00
	A50	6,147,567	11/14/02	Welland et al.			5/29/98
	A51	6,327,463	12/4/01	Welland			5/29/98
	A52	6,233,441	5/15/01	Welland			5/19/98
	A53	6,304,146	10/16/01	Welland			5/29/98
	A54	6,308,055	10/23/01	Welland et al.			5/29/98
	A55	6,150,891	11/21/00	Welland et al.			5/29/98
	A56	6,317,006	11/13/01	Welland et al.			7/21/00
	A57	6,137,372	10/24/00	Welland			5/29/98
	A58	6,226,506	5/1/01	Welland et al.			5/29/98
	A59	6,311,050	10/30/01	Welland et al.			5/29/98
	A60	4,179,670	12/18/79	Kingsbury			1/27/78
	A61	4,204,174	5/20/80	King			11/9/78
	A62	4,686,488	8/11/87	Attenborough			1/31/86
	A63	4,758,802	7/19/88	Jackson			2/21/86
	A64	5,055,802	10/8/91	Hietala et al.			4/30/90
	A65	5,079,521	1/7/92	Gaskell et al.			11/21/90
	A66	5,224,132	6/29/93	Goldberg			1/17/92
	A67	5,379,003	1/3/95	Bizen			12/9/93
	A68	5,446,767	8/29/95	Nakagawa et al.			4/20/93
UC	A69	5,517,534	5/14/96	Knierim			11/14/94

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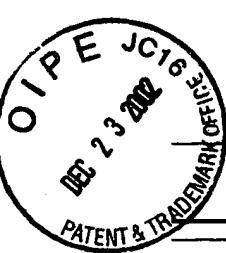
Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.
OC	A70	5,534,825	7/9/96	Goma et al.			4/28/95
	A71	5,539,359	7/23/96	Goma			3/29/95
	A72	5,576,667	11/19/96	Goma			11/21/95
	A73	5,581,584	12/3/96	Inoue et al.			7/20/94
	A74	3,571,743	3/23/71	Menkes			10/30/68
	A75	3,899,746	8/12/75	Gammel			9/14/73
	A76	4,009,448	2/22/77	Hopwood et al.			1/6/76
	A77	4,099,137	7/4/78	Alm, Jr. et al.			7/10/77
	A78	4,805,198	2/14/89	Stern et al.			5/19/87
	A79	4,888,564	12/19/89	Ishigaki			11/2/88
	A80	5,315,269	5/24/94	Fujii			7/31/92
	A81	5,495,205	2/27/96	Parker et al.			1/6/95
	A82	5,625,325	4/29/97	Rotzoll et al.			12/22/95
	A83	5,648,744	7/15/97	Prakash et al.			12/22/95
	A84	5,686,864	11/11/97	Martin et al.			9/5/95
	A85	5,739,730	4/14/98	Rotzoll			12/22/95
	A86	5,852,384	12/22/98	Sakakura et al.			4/18/97
	A87	5,856,763	1/5/99	Reeser et al.			3/5/97
	A88	5,936,474	8/10/99	Rousselin			3/28/97
	A89	5,157,358	10/20/92	Benson			11/20/91
	A90	4,205,272	5/27/80	Kumagai			4/13/78
	A91	4,980,653	12/25/90	Shepherd			9/5/89
OC	A92	5,909,150	6/1/99	Kostelnik et al.			10/23/97

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UC	A93	4,713,631	12/15/87	Enderby et al.			1/6/86
1	A94	3,538,450	11/3/70	Andrea et al.			11/4/68
	A95	4,484,153	11/20/84	Borras et al.			4/6/81
	A96	4,602,220	7/22/86	Kurihara			8/14/85
	A97	4,893,087	1/9/90	Davis			1/7/88
	A98	4,905,306	2/27/90	Anderson			2/26/88
	A99	4,926,144	5/15/90	Bell			9/29/88
	A100	4,998,077	3/5/91	Nanni et al.			12/20/89
	A101	5,034,703	7/23/91	Schumacher			7/11/90
	A102	5,036,295	7/30/91	Kamitani			7/30/90
	A103	5,117,206	5/26/92	Imamura			12/4/90
	A104	5,175,884	12/29/92	Suarez			6/1/90
	A105	5,281,927	1/25/94	Parker			5/20/93
	A106	5,369,376	11/29/94	Leblebicioglu			11/29/91
	A107	5,644,270	7/1/97	Moyer et al.			3/15/96
	A108	5,691,669	11/25/97	Tsai et al.			1/11/96
	A109	5,748,043	5/5/98	Koslov			5/3/94
	A110	5,808,531	9/15/98	Nakano			11/8/96
	A111	5,844,868	12/1/98	Takahashi et al.			3/26/97
	A112	5,867,069	2/2/99	Kiser			6/9/98
	A113	5,898,345	4/27/99	Namura et al.			7/14/97
	A114	5,963,100	10/5/99	Tolson et al.			2/24/98
UC	A115	5,705,955	1/6/98	Freeburg et al.			12/21/95

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JC	A116	4,926,140	5/15/90	Schenberg			7/19/89
	A117	5,038,117	8/6/91	Miller			9/7/90
	A118	5,258,720	11/2/93	Tanis et al.			3/2/84
	A119	5,258,724	11/2/93	Tanis et al.			12/30/83
	A120	5,661,269	8/26/97	Fukuzaki et al.			3/17/95
	A121	5,561,398	10/1/96	Rasmussen			5/16/95
	A122	5,619,148	4/8/97	Guo			10/10/95
	A123	6,016,332	1/18/00	Smith et al.			12/19/97
	A124	6,208,488	2/22/00	Landman et al.			10/30/97
	A125	6,130,577	10/10/00	Tamba et al.			6/11/96
	A126	3,983,485	9/28/76	Stuart			2/28/75
	A127	4,888,560	12/19/89	Ogura			7/15/88
	A128	4,255,714	3/10/81	Rosen			2/21/79
	A129	5,006,819	4/9/91	Buchan et al.			5/21/90
	A130	5,418,497	5/23/95	Martin			7/5/94
	A131	5,698,469	12/16/97	Mohwinkel et al.			3/6/95
	A132	5,949,291	9/7/99	Newland			1/21/98
	A133	4,057,760	11/8/77	Koch			6/7/76
	A134	5,831,482	11/3/98	Salvi et al.			3/3/97
JC	A135	5,351,014	9/27/94	Ichiyoshi			8/2/93

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VC	B1	WO 00/22735	4/20/00	Ali			
	B2	GB2233518A	1/9/91	Dedic			
	B3	0643477A2	3/15/95	Hulkko et al.			
	B4	WO 00/11794	3/2/00	Moore et al.			
	B5	WO 00/01074	1/6/00	Van Der Zwan et al.			
	B6	WO 99/22456	5/6/99	Grenabo			10/27/98
	B7	JP359127408 A	7/23/84	Shibata et al.			1/11/83
	B8	JP403258103 A	11/18/91	Kitamura et al.			3/8/90
	B9	JP402298107 A	12/10/90	Obayashi			5/12/89
	B10	JP403070202 A	3/26/91	Araki et al.			8/9/89
VC	B11	JP04035302 A	2/6/92				5/28/90

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Exam. Init.	Ref. Des.	Citation
VC	C1	Stephen Jantzi et al., "Quadrature Bandpass ΔΣ Modulation for Digital Radio," IEEE Journal of Solid-State Circuits, Vol. 32, No. 12, December 1997, pp. 1935-1950.
VC	C2	Stephen Jantzi et al, "A Complex Bandpass ΔΣ Converter For Digital Radio," ISCAS, May/June 1994, pp. 453-456.

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**Other Art (Including Author, Title, Date, Pertinent Pages, Etc.)**

Exam. Init.	Ref. Des.	Citation
UC	C3	"Analog Devices Delivers World's First Open Market GSM Direct Conversion Radio Chipset," Analog Devices Corporate Information Press Release, <a href="http://contentanalog.com/pressrelease/prdisplay/0,1622,102,00.html">http://contentanalog.com/pressrelease/prdisplay/0,1622,102,00.html</a> , September 13, 1999, pp. 1-4.
	C4	Data Sheet, CX74017, "RF Transceiver for Single, Dual, or Tri-Band GSM/GPRS Applications," Conexant, January 2, 2001, pp. 1-16.
	C5	Jacques C. Rudell et al, "A 1.9-GHz Wide-Band IF Double Conversion CMOS Receiver for Cordless Telephone Applications," IEEE Journal of Solid-State Circuits, Vol. 32, No. 12, December 1997, pp. 2071-2088.
	C6	Jan Crols et al., "Low-IF Topologies for High-Performance Analog Front Ends of Fully Integrated Receivers," IEEE Transactions on Circuits and Systems-II: Analog and Digital Signal Processing, Vol. 45, No. 3, March 1998, pp. 269-282.
	C7	Jacques C. Rudell et al., "Recent Developments In High Integration Multi-Standard CMOS Transceiver for Personal Communication Systems," invited paper at the 1998 International Symposium on Low Power Electronics, Monterey, California, 6 pgs.
	C8	Asad Abidi, "CMOS Wireless Transceivers: The New Wave," IEEE Communications Magazine, August 1999, pp. 119-124.
	C9	Data Sheet, UAA3535HL, "Low Power GSM/DCS/PCS Multi-band Transceiver," Philips Semiconductors, February 17, 2000, pp. 1-24.
	C10	Stephen Jantzi et al., "FP 13.5: A Quadrature Bandpass ΔΣ Modulator for Digital Radio," Digest of Technical Papers, 1997 IEEE International Solid-State Circuits Conference, First Edition, February 1997, pp. 216-217, 460.
	C11	S. A. Jantzi et al., "The Effects of Mismatch In Complex Bandpass ΔΣ Modulators," IEEE, 1996, pp. 227-230.
	C12	Qiuting Huang, "CMOS RF Design-The Low Power Dimension," IEEE 2000 Custom Integrated Circuits Conference, pp. 161-166.
UC	C13	Paolo Orsatti et al., "A 20-mA-Receive, 55-mA-Transmit, Single-Chip GSM Transceiver in 0.25-μm CMOS," IEEE Journal of Solid-State Circuits, Vol. 34, No. 12, December 1999, pp. 1869-1880.

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UC	C14	Qiuting Huang et al., "The Impact of Scaling Down to Deep Submicron on CMOS RF Circuits," IEEE Journal of Solid-State Circuits, Vol. 33, No. 7, July 1998, pp. 1023-1036.
	C15	Behzad Razavi, "Design Considerations for Direct-Conversion Receivers," IEEE Transactions on Circuits and Systems-II: Analog and Digital Signal Processing, Vol. 44, No. 6, June 1997, pp. 428-435.
	C16	Farbod Behbahani et al., "CMOS Mixers and Polyphase Filters for Large Image Rejection," IEEE Journal of Solid-State Circuits, Vol. 36, No. 6, June 2001, pp. 873-887.
	C17	Jan Crols et al., "A Single-Chip 900 MHz CMOS Receiver Front-End With A High Performance Low-IF Topology," IEEE Journal of Solid-State Circuits, Vol. 30, No. 12, December 1995, pp. 1483-1492.
	C18	Analog Devices, Single-Chip Direct-Conversion GSM/GPRS/EDGE RFIC, Othello One, <a href="http://www.analog.com">www.analog.com</a> , 2 pgs.
	C19	Analog Devices, AD6523/AD6524, GSM Direct Conversion Radio Chip Set, <a href="http://www.analog.com">www.analog.com</a> , 2 pgs.
	C20	Analog Devices, GSM 3 V Transceiver IF Subsystem, AD6432, <a href="http://www.analog.com">www.analog.com</a> , pp. 1-20.
	C21	Hitachi, "RF Transceiver IC For GSM And PCN Dual Band Cellular Systems," HD155121F, ADE-207-265(Z), 1 <sup>st</sup> Edition, November 1998, pp. 1-56.
	C22	Analog Devices, AD7002 Specification, LC2MOS, GSM Baseband I/O Port, Rev. B, 1997, pp. 1-16.
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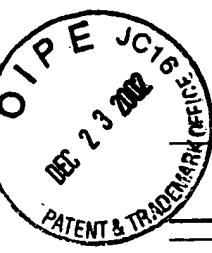
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